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JUL 12 2002

Mr. Paul Pardi
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

DOE-0580-02

Dear Mr. Pardi:

**REVISION 8.0 OF THE FERNALD ENVIRONMENTAL MANAGEMENT PROJECT'S
RESOURCE CONSERVATION AND RECOVERY ACT PART A/B PERMIT APPLICATION**

- References: 1) Letter and Director's Final Findings and Orders, T. E. Crepeau to P. Hamric and J. Bradburne, dated June 6, 1996
- 2) Letter, J. Craig to P. Pardi, "Proposed Strategy for Addressing Revisions to the Fernald Environmental Management Project's Resource Conservation and Recovery Act Part A/B Permit Application," dated September 24, 1997

Enclosed for your approval are updated sections of the Fernald Environmental Management Project's (FEMP) Resource Conservation and Recovery Act (RCRA) Part A/B Permit Application (Revision 8.0). These revisions have been completed in accordance with Section V.9 of the Integrated RCRA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Director's Findings and Orders (DF&O) (Reference 1), and the guidelines established in Reference 2.

As part of this submittal, the FEMP is proposing to replace the Drum Management Plan (DMP) and Waste Determination Plan (WDP) with information provided in several sections of the FEMP's RCRA Part B Permit Application. Under Subsections 3.8(c) and 3.5.1(a) of the Stipulated Amendment to the Consent Decree (SACD), the Department of Energy (DOE) was required to provide information to the Ohio Environmental Protection Agency (OEPA) regarding the management and characterization of its containerized waste population. Since the Part B Permit Application already addresses much of the scope of the DMP and WDP, the FEMP is proposing to incorporate the requirements for these plans into the permit application. To assist in this process, a table linking the SACD requirements for the DMP and WDP to the applicable sections of the RCRA Part B Permit Application, which address compliance with these requirements is provided as Enclosure 1.

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Changes to the application have been made using redlines and strikeouts to assist in reviewing. A summary of these revisions is provided as Enclosure 2.

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In accordance with Section V.9 of the referenced DF&O, please provide written confirmation of approval of the RCRA Part A/B Permit Application, as amended. Additionally, DOE is requesting written concurrence that the revised Part B Permit Application satisfies all SADC requirements for a DMP and WDP, and that separate documents for these plans are no longer required.

If you have any questions, please contact Ed Skintik at (513) 648-3151.

Sincerely,


Stephen H. McCracken
Director

Enclosures

cc w/enclosures:

J. Carroll, OEPA-Columbus

D. Ullrich, USEPA-5

AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

P. Harris, OEPA-Dayton

J. Saric, USEPA-5

T. A. Schneider, OEPA-Dayton

J. B. Buckley, Fluor Fernald, Inc./MS52-3

R. V. Holmes, Fluor Fernald, Inc./MS3

T. A. Poff, Fluor Fernald, Inc./MS65-2

RCRA Operating Record, Fluor Fernald, Inc./MS28

ENCLOSURE 1

INTEGRATION OF CONSENT DECREE/SACD/DRUM MANAGEMENT PLAN/WASTE DETERMINATION PLAN REQUIREMENTS
WITH FEMP'S RCRA PART B PERMIT APPLICATION

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I. CROSS-REFERENCE TABLE OF SACD REQUIREMENTS ADDRESSED BY THE 1991 DRUM MANAGEMENT AND THE FEMP'S RCRA PART B PERMIT APPLICATION

SACD REFERENCE	SACD REQUIREMENT	IMPLEMENTATION UNDER FEMP'S RCRA PART B PERMIT APPLICATION
Subsection 3.5.1(f)	DOE shall, as soon as reasonably possible but in no event more than sixty (60) days from a determination that any drummed materials are hazardous or mixed waste, move such materials to units that are identified in the FMPC Part A Permit Application submitted September 1989, or subsequent revisions.	Section D-1c (Containers of Waste Undergoing Characterization/Newly Characterized Waste) has been added to the FEMP's Part B Permit Application to address the management of containers of uncharacterized waste and the transfer of these containers into approved storage following characterization.
Subsection 3.5.1(f)	If storage space which meets RCRA and Ohio hazardous waste storage requirements is not available, DOE shall store such wastes in a manner as protective of human health and the environment as possible, shall perform daily leakage inspections on all such containers that are not located under cover, and shall, within sixty (60) days of a determination that sufficient hazardous waste storage space is not available, submit a plan and schedule for Ohio EPA approval for short-term storage of such wastes. DOE shall perform weekly inspections in accordance with 40 CFR 265.15 and 265.174, and OAC 3745-65-15 and 3745-66-74 on all such containers.	This requirement has been moved from Section F-4b (Prevention of Run-Off to Other Areas) to Section D-1c (Containers of Uncharacterized Waste/Newly Characterized Waste) in order to consolidate requirements for storing these wastes.
Subsection 3.5.1(f)	DOE shall store backlog material which is being evaluated for the potential to be hazardous or mixed waste, but for which such evaluations have not been completed, on the best available hard surfaced facilities at the FMPC in such a manner that any leakage can be readily detected and shall maintain aisle space meeting the requirements of 40 CFR 265.35 and OAC 3745-65-35.	Text has been added to Section D-1c (Containers of Uncharacterized/Newly Characterized Waste) to state that the FEMP will store containers of uncharacterized waste on the best available hard surface. The primary storage areas for these wastes will be the Plant 1 Pad, Pilot Plant Warehouse and the Plant 6 Warehouse. Storage configurations for containers of uncharacterized waste (e.g. aisle spacing, stacking height) will conform to Part B requirements for the operation of these three storage units.

ENCLOSURE 1

INTEGRATION OF CONSENT DECREE/SACD/DRUM MANAGEMENT PLAN/WASTE DETERMINATION PLAN REQUIREMENTS
WITH FEMP'S RCRA PART B PERMIT APPLICATION

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I. CROSS-REFERENCE TABLE OF SACD REQUIREMENTS ADDRESSED BY THE 1991 DRUM MANAGEMENT AND THE FEMP'S RCRA PART B PERMIT APPLICATION

SACD REFERENCE	SACD REQUIREMENT	IMPLEMENTATION UNDER FEMP'S RCRA PART B PERMIT APPLICATION
Section 3.8(a)	DOE shall ensure that sufficient aisle space is maintained on the Plant 1 Pad to meet the requirements of 40 CFR 265.35 and OAC 3745-65-35, except in the covered staging area.	This requirement has already been incorporated into the FEMP's RCRA Part B Permit Application. Sections D-1a(2) (Container Management Practices) and F-3b (Aisle Space Requirements) of the FEMP's RCRA Part B Permit Application state that a minimum aisle spacing of 24 inches will be maintained between pallets or between containers not stored on pallets at the uncovered portions of Plant 1 Pad. A minimum aisle space of 22 inches will be maintained between pallets or between containers not stored on pallets on the covered areas of Plant 1 Pad (the Tension Support Structures and the hazardous waste storage lockers) and the indoor storage areas. A four foot main aisle is also provided in each area to allow for the unobstructed movement of personnel, fire protection equipment, and spill control equipment.
Section 3.8(b)	<p>Until such time as the approximate 16,000 drums identified on Attachment 1 are removed from the Plant 1 Pad, or such drums are determined not to contain hazardous or mixed waste, DOE shall perform daily leakage inspections on all such drums, and shall perform weekly inspections in accordance with 40 CFR 265.15 and 265.174, and OAC 3745-65-15 and 3745-66-74.</p> <p>DOE shall perform daily leakage inspections on the remainder of the containers stored on the Plant 1 Pad until such time as these containers are removed from the Pad or are determined not to contain hazardous or mixed waste.</p>	Section F-2b(1) (Container Inspection/Storage Area Inspections) and Attachment F-1 (Facility Inspection Schedule) of the FEMP's RCRA Part B Permit Application contain requirements for conducting daily leakage inspections of containers of hazardous waste stored on the uncovered portions of Plant 1 Pad and weekly inspections of the Plant 1 Pad storage area. These sections of the Part B have been revised to include the requirement to conduct daily leakage inspections of containers of uncharacterized waste stored on the uncovered portions of Plant 1 Pad. This requirement has also been added to Section D-1(c) (Containers of Waste Undergoing Characterization/Newly Characterized Waste) which discusses the management of containers of uncharacterized waste.

ENCLOSURE 1

INTEGRATION OF CONSENT DECREE/SACD/DRUM MANAGEMENT PLAN/WASTE DETERMINATION PLAN REQUIREMENTS
WITH FEMP'S RCRA PART B PERMIT APPLICATION

b

I. CROSS-REFERENCE TABLE OF SACD REQUIREMENTS ADDRESSED BY THE 1991 DRUM MANAGEMENT AND THE FEMP'S RCRA PART B PERMIT APPLICATION

SACD REFERENCE	SACD REQUIREMENT	IMPLEMENTATION UNDER FEMP'S RCRA PART B PERMIT APPLICATION
Section 3.8(c)	Until such time as all containers evaluated under Paragraph 3.5.1 of the SACD and all other containers of hazardous or mixed wastes are removed from the Plant 1 Pad, DOE shall maintain containment measures at the overpack covered staging area, such as the use of temporary dikes or liners, sufficient to ensure that any potential spillage or releases of material from drums are contained on the covered staging area of the Pad and are not released into any drains, soil, storm sewers, or other areas outside of the covered staging area.	Section F-2c (Remedial Action) of the FEMP's RCRA Part B Permit Application currently identifies the location of repacking operations. A discussion of containment measures used in overpacking and repacking has been added to this section.

ENCLOSURE 1

INTEGRATION OF CONSENT DECREE/SACD/DRUM MANAGEMENT PLAN/WASTE DETERMINATION PLAN REQUIREMENTS
WITH FEMP'S RCRA PART B PERMIT APPLICATION

I. CROSS-REFERENCE TABLE OF SACD REQUIREMENTS ADDRESSED BY THE 1991 DRUM MANAGEMENT AND THE FEMP'S RCRA PART B PERMIT APPLICATION

SACD REFERENCE	SACD REQUIREMENT	IMPLEMENTATION UNDER FEMP'S RCRA PART B PERMIT APPLICATION
Section 3.8(c)	For any drums that are actually leaking in such a manner as to allow wastes to be released onto the pad DOE shall immediately contain the release or spill and shall manage the drum in accordance with OAC 3745-66-71 as soon as possible after detection, but in no event more than 24 hours after discovery.	<p>Sections D-1a(3)(e) (Removal of Liquids from Containment Systems) and G-4i (Container Spills and Leakage) of the FEMP's RCRA Part B Permit Application contain a general discussion of spill response activities based on the requirements of the Consent Decree/SACD but do not contain specific requirements for responding to Type I, II and III containers (these originated from the 1991 Drum Management Plan). Section 6.0 of the draft Container Management Plan proposes revisions to spill response actions identified in the 1991 Drum Management Plan consistent with the SACD and hazardous waste management regulations. These proposed revisions have been incorporated into Sections D and G of the FEMP's RCRA Part B Permit application.</p> <p>The following changes are being proposed to spill response actions identified in the 1991 Drum Management Plan:</p> <ol style="list-style-type: none">1. The definition of a Type I container has been changed for consistency with Section 3.8(c) of the SACD;2. Response actions for Type I containers have been revised to state that the SACD requirement to manage (by repair or overpack/repack) hazardous/mixed/uncharacterized waste containers within 24 hours of discovery will be met except where accomplishing this will violate DOE safety processes and procedures. Once these concerns have been resolved, the required actions will be completed. Examples of safety parameters that will be considered during a response are provided.3. Remedial actions for Type 1 containers have been revised to include the option of container repair.4. Criteria for identifying and responding to Type II and Type III containers have been revised to allow for additional flexibility in managing these containers.

ENCLOSURE 1

INTEGRATION OF CONSENT DECREE/SACD/DRUM MANAGEMENT PLAN/WASTE DETERMINATION PLAN REQUIREMENTS
WITH FEMP'S RCRA PART B PERMIT APPLICATION

II. WASTE DETERMINATION PLAN

The Waste Determination Plan is currently included as an Attachment to the FEMP's RCRA Part B Permit Application with a note indicating that this plan would be withdrawn and replaced by Section C-Waste Characteristics once the FEMP was issued a hazardous waste permit. This note was added based on comments received from Ohio EPA during their review of the permit application. This review was conducted prior to the issuance of the June 1996 Director's Findings and Orders which exempted the FEMP from the requirement to obtain a hazardous waste storage permit.

The FEMP is proposing to replace the Waste Determination Plan with Section C of the RCRA Part B Application. Language has been added to Section C stating that this section meets the requirements in Section 3.5.1(a) of the SACD for the submittal of a Waste Determination Plan.

**ENCLOSURE 2
SUMMARY OF CHANGES
TO THE
FEMP'S RCRA PART A/B PERMIT APPLICATION
(REVISION 8.0)**

SECTION A

1. The list of environmental permits provided in Section XA (Other Environmental Permits) and Attachment 1 has been updated. Air and wastewater permits associated with units that are no longer operating have been deleted.
2. The estimated annual quantity of hazardous waste reported in Section XIV.B has been increased based on current inventories.
3. The unit type for the Abandoned Sump West of the Pilot Plant (HWMU #22) in Table A-1 was changed to D80 (landfill) to reflect the soil contamination associated with this unit.

SECTION B - FACILITY DESCRIPTION

1. Section B-1 (General Description) was updated to specify the division of responsibilities between DOE and Fluor Fernald, Inc. and to reflect organizational changes within DOE-HQ.
2. Information on the status of the remediation of Operable Units 4 and 5 has been updated in Sections B-1 (General Description) and B-2a (General Requirements - Injection and Withdrawal Wells).
2. Sections B-2a (General Requirements - Access Control) and B-4 (Traffic Information) were revised to address the closing of the North Access Road and changes in the monitoring of access points into the former production area.
4. An updated Production Area Plot Plan is provided as Figure B-6.

SECTION C- WASTE CHARACTERISTICS

- 1) The FEMP is proposing to replace the Waste Determination Plan with Section C as part of the submittal of this revision of the FEMP's RCRA Part B Permit Application. Text has been added to Section 1.0 (Introduction) stating that Section C will also be used to meet the requirement in Section 3.5.1(a) of the Stipulated Amendment to the Consent Decree (SACD) for the submittal

of a Waste Determination Plan. Attachment C-1, which included a copy of the Waste Determination Plan, has been removed from Section C.

- 2) The following sections have been revised: a) Section C-2.1 (Procedures) to include the use of portable field equipment to enhance process knowledge determinations; b) Section C-2.2 (Analysis) to include existing analytical data (e.g. RI/FS data) as source of information for waste characterization; c) Section C-2.3 (Land Disposal Restrictions) to clarify that LDR treatment requirements are identified as part of the waste characterization process; d) Sections C-2.5 (Records) and C-3.5 (Records) to incorporate the proposal to store MEF files associated with hazardous waste containers that are no longer in inventory at the Records Center; and e) Section C-4.0 (Storage and Management of Wastes) to remove the requirement to provide a one-time notice to the RCRA Operating Record since these wastes are treated as part of the site's CERCLA remedial program.
- 3) Text throughout Section C was revised to reflect organizational changes within the FEMP's Waste Characterization Program.
- 4) Table C-3 (DOE Waste Categories Descriptions and Analysis Rational - Lab Packs) has been revised to include D003 (reactive cyanide) as a possible waste code associated with Inorganic Sludges and Particulates (generated by the lab).
- 5) Table C-4, RCRA Hazardous Waste Streams, has been updated to include characterizations completed since the last submittal of the FEMP's RCRA Part A/B Permit Application (Revision 7.0).
- 6) The latest version of the Prototype Sampling and Analysis Plan for Waste at the FEMP is provided as Attachment C-7.

SECTION D- PROCESS INFORMATION

- 1) Descriptions of the Plant 1 Pad in Section D-1 (Containers) and Attachment D-1 (Coating Systems/Vendor Specifications) have been updated to remove references to the sumps in TS-4, 5 and 6. These sumps were filled in and the trench drains were re-sealed in 2001 (per 10/09/01 letter to Phil Harris of Ohio EPA). Revised secondary containment calculations for TS-4, 5 and 6 are provided as Attachment D-2.
- 2) Section D-1c (Containers of Uncharacterized/Newly Characterized Waste) has been added to incorporate the requirements of the Drum Management Plan and Subsections 3.5.1(f) and 3.8(b) of the Stipulated Amendment to the Consent Decree (SACD).

- 3) Section D-1a(2) (Container Management Practices) has been revised to specify actions taken prior to on-site transport of containers and the preparation (e.g. weighing and labeling/stenciling) of containers for hazardous waste storage and to include the use of the Container Tracking Log (CTL) to track on-site movement of containers. An example of the CTL is provided as Figure D-4.
- 4) Additional changes have been made to Section D to a) address organizational changes; b) include the use of other devices (such as spill pallets) to segregate containers of incompatible wastes; c) revise information on containment/run-on controls for the Pilot Plant Warehouse for consistency with other covered storage areas; d) include a reference to Section G-4i (Container Spills and Leakage) for more specific information on spill response in accordance with the requirements of the Drum Management Plan and the SACD; and (e) correct information regarding Subpart CC VOC limits.

SECTION F - PROCEDURES TO PREVENT HAZARDS

- 1) Section F-1 (Security) has been revised to reflect the closing of the North Access Road and changes to site access requirements.
- 2) Section F-2 (Inspection Schedule) has been revised to: a) move the daily/weekly inspection requirements for Plant 1 Pad as required by the Drum Management Plan and Subsection 3.8(b) of the SACD from Section F-2a(2) (Frequency of Inspection) to F-2b(1) (Container Inspection); b) include weekly leakage inspections for containers of thorium mixed waste stored on Plant 1 Pad (per 3/5/02 e-mail from Phil Harris of Ohio EPA); c) remove the requirement to conduct hydrostatic testing of the TS-6 sump since this sump has been filled in; and d) add a discussion of containment measures used for overpacking/repacking containers to Section F-2c (Remedial Action) in accordance with the requirements of the Drum Management Plan and Subsection 3.8(c) of the SACD.
- 3) A discussion of the requirements in Subsection 3.5.1(f) of the SACD for short-term storage of hazardous waste containers has been moved from Section F-4b (Prevention of Run-Off to Other Areas) to Section D (Process Information).
- 4) Additional changes have been made to Section F to a) update information on the FEMP's fire protection system; b) include the use of other devices (such as spill pallets) to segregate containers of incompatible wastes; c) delete information regarding the storage of incompatible waste containers from Section F-5(d) (Management of Incompatible Wastes in Containers) since this is already discussed in Section F-5b (General Precautions for Handling

Ignitable or Reactive Wastes and Mixing Incompatible Wastes); and d) correct information regarding Subpart CC VOC limits.

- 5) Attachment F-1 (Facility Inspection Schedule) has been revised to: a) incorporate inspection requirements from the Drum Management Plan and Subsection 3.8(b) of the SACD; b) include weekly leakage inspections for containers of thorium mixed waste stored on Plant 1 Pad (per 3/5/02 e-mail from Phil Harris of Ohio EPA); and c) remove the requirement to conduct hydrostatic testing of the TS-6 sump since this sump has been filled in.

SECTION G - CONTINGENCY PLAN

- 1) Section G has been updated to remove Building 64/65 since this building is no longer used for the storage of containers of thorium mixed waste, to indicate that Building 60 is currently being used for the storage of bulk RCRA soil, and to include PCBs among the list of waste types stored in the tension support structures and hazardous waste storage lockers at Plant 1 Pad.
- 2) Additional revisions have been made to this section to a) update emergency telephone numbers; b) address changes in administrative requirements for container tracking; c) reflect organizational changes; d) delete references to the Mobile Operations Center and the Joint Information Center since these units are no longer operational (this includes revisions to Table G-2, Figures G-2, G-3.1, and G-5.2); c) update information on emergency response capabilities and procedures; d) address the relocation of the FEMP's Medical Department to T-195; and e) include the use of other devices (such as spill pallets) to segregate incompatible wastes.
- 3) Section G-4i (Container Spills and Leakage) has been revised to provide additional information regarding spill response actions consistent with the requirements of the Drum Management Plan and the SACD. These revisions were originally proposed in Section 6.0 of the draft Container Management Plan submitted to Ohio EPA in October 2001.
- 4) Figures G-4 (Implementation and Notification) and G-6 (Communications Links) have been combined and are provided as a revised Figure G-4.
- 5) Attachment G-1 (Emergency Procedures, Site Layout and Equipment Information) has been revised to update information on evacuation routes, to delete a discussion of the 90 Day Storage Locker on p.1 since information on this unit is provided on p. 11, to note the change in location of the FEMP's Medical Department and to remove Building 64/65 since this building is no longer being used for the storage of containers of mixed thorium waste.

- 6) Maps provided as Attachment G-2 (Location of FEMP Fire Hydrants) have been updated.

SECTION H - PERSONNEL TRAINING

- 1) This section has been revised to a) reflect organizational changes; b) address changes to the profile process for identifying employee training requirements; c) incorporate changes to the site's radiological training program; and d) include the use of performance standards as part of the training evaluation.